

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,748,151 B1  
DATED : June 8, 2004  
INVENTOR(S) : Watanabe et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3,

Line 11, begin new paragraph after “(1550 nm+-50 nm).” and before “In still”.

Column 6,

Line 46, delete “a” in “attenuation a becomes” and replace with --  $\alpha$  --.

Column 10,

Line 29, “signals” should read -- signal --.

Please insert the following as claims 10, 11 and 12:

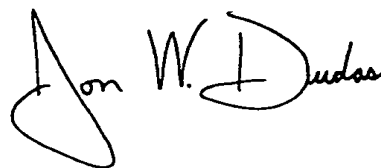
– 23. An optical attenuator in the form of a single mode optical fiber for receiving optical signals having wavelengths within a predetermined range of wavelengths, attenuating a received optical signal and outputting the attenuated optical signal, said optical attenuator comprising a core containing a dopant which attenuates the received optical signal more when its wavelength is shorter within the predetermined range of wavelengths, said dopant being contained only in a dopant area limited to a centermost portion of said core, said core comprising said centermost portion and a peripheral portion contiguous with said centermost portion and free of dopant, said core having a refractive index at said centermost portion greater than that of said peripheral portion, said optical fiber having a mode field for single mode transmission of the optical signal inclusive of said centermost and peripheral portions of said core.

24. The optical attenuator as claimed in claim 23, wherein the refractive index has a profile selected from the group consisting of a graded-index type, parabolic shapes, triangular wave shapes, square wave shapes and trapezoidal wave shapes.

25. The optical attenuator as claimed in claim 23, further comprising cladding on and surrounding said core, said cladding not containing dopant. –

Signed and Sealed this

Twenty-third Day of November, 2004



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*